1   this morning? The last thing we talked about was

2   a telephone conversation between --

3   MR. O'ROARK: Yes. I'm changing

4   subjects now.

5   MR. ALEXANDER: I just wanted to make

6   sure what context.

7   BY MR. O'ROARK:

8   Q.   Fair enough. I'm talking about the

9   general development, we're moving away from the

10   CSR --

11   MR. ALEXANDER: And you're referring to

12   statements made earlier at this deposition?

13   BY MR. O'ROARK:

14   Q.   Yes, I am. Mr. Berman, do I have it

15   right that there were some things you needed to

16   work out after April 30th?

17   A.   That's correct.

18   Q.   Can you tell me what bugs or problems

19   those were?

20   A.   I mean, it's just common software

21   bugs. What I mean by that is something -- a

22   specific permutation of trying to do some

23   processing may respond in an exception or an error

24   that we had not taken into account. Things of

25   that nature.

BY MR. RUNNELS:

1

2   A.   May I add to that?

3   Q.   Sure.

4   A.   When we spoke about acceptance testing,

5   the purpose of that is that, as developers, we're

6   more aware of the technical issues than the

7   business issues. So it works when I test it,

8   right, but I'm testing it in the way that I think

9   it should be used.

10   So what I would do is I would give it

11 to Alex, and Alex would test it. And he would

12 say, "When I do this" -- which is something I

13 hadn't thought of to do when I tested --"this

14 happens, it breaks down." And I would fix it.

15   MR. O'ROARK: I believe that's all I

16 have.

17   (A discussion was had off the record.)

18   EXAMINATION

19 BY MR. HOPKINS:

20   Q.   Hi, I'm Mike Hopkins with AT&T. I

21 heard that you have children. I wish you could

22 try to explain some of these technical things to

23 me like you do to your children, because some of

24 it has gone over my head so far. And I won't use

25 any Latin phrases, to make it easier on you.

1   I'm just going to -- the way I want to

2   do this is kind of step through your report and go

3   page by page to the extent I can on things that I

4   need to get a little bit more clarification on.

5   And on the first -- up in the executive

6   overview, you said that you were tasked to prove

7   the integration viability. Did you look at

8   whether the quality of the integration matches

9   what BellSouth provides itself?

10   BY MR. BERMAN:

11   A.   No.

12   Q.   Did you look at all at how BellSouth

13   runs the integration on its side, the regional

14   negotiation system?

15   A.   No.

16   Q.   You had mentioned that there was

17   another project that you were working on for

18   BellSouth in Roanoke. Does that have anything to

19   do with the ordering systems that they -- billing

20   systems that they use in the local arena down here

21   in the BellSouth region, such as the regional

22   negotiation system or any other ordering system?

23   A.   I don't know the answer to that.

24   Q.   Do you?

25   //

BY MR. RUNNELS:

1   A.   The only place that it really crosses,
2
3 I suppose, is customers have the ability to have
4 equipment that they've purchased billed on their
5 BellSouth telephone bill. I'm working for
6 BellSouth Communication Systems right now
7 primarily network and --
8   Q.   Okay.
9   A.   -- equipment. And so they do feed
10 essentially information that would normally appear
11 on an invoice to BellSouth.
12   Q.   So it's not the BellSouth local
13 service?
14   A.   No.
15   Q.   It's a different part of BellSouth?
16   A.   Yes, it's totally different.
17   Q.   I need a scorecard for this.
18   (A discussion was had off the record.)
19   Q.   Earlier you said that you didn't view
20 the interfaces of prototype. And I'm not exactly
21 sure how you make a distinction between a
22 prototype and a commercial interface. Can you
23 explain that to me?
24 BY MR. BERMAN:
25   A.   The point I was trying to make was is

1   that the underlying services that we wrote for the

2   OPII software are production capable services,

3   capable of handling certain levels of load and

4   throughput. And the only way that you know what

5   load that can take is based -- on it's a

6   client-by-client situation.

7   Q.   So your off-the-shelf --

8   A.   Components.

9   Q.   -- things you use --

10   A.   Uh-huh (affirmative).

11   Q.   -- have been used in production --

12   A.   That's correct.

13   Q.   -- with clients? Okay. Did you

14   receive a statement of work from BellSouth on what

15   you were supposed to accomplish?

16   A.   I don't know the answer to that.

17   Q.   Were your instructions to proceed with

18   the project, were those verbal or written?

19   A.   From within Albion, from Rob Marchant

20   is the only verbal information that I had for the

21   project.

22   Q.   So he told you to do something. It

23   wasn't any formal written documents saying do

24   this?

25   A.   That's correct. Jack had started on

1   the project full-time already. And Jack was

2   already in the middle of getting -- you know,

3   determining what the actual work was and the

4   requirements and things like that.

5   Q.   And I'm not directing these questions

6   to any one of you right now specifically. But if

7   you hear anything that you can add to that, I'd

8   appreciate it if you do.

9   BY MR. RUNNELS:

10   A.   Okay. I don't recall that it was

11   necessarily written down. I don't know if it was

12   written down from BellSouth or from Rob. I met

13   with Rob initially to discuss what was expected of

14   me for the application. And I was told that we

15   were to -- I guess the word prototype has been

16   thrown around.

17   And I wanted to add a little

18   clarification to that. I guess the reason it's

19   called prototype is because it's not necessarily

20   for any particular CLEC. A lot of stuff I asked

21   Alex, "What should I do here?" And he said,"It's

22   up to you. Pretend you're the CLEC. What would

23   you like to see there?" So there were certain

24   decisions that I made on my own regarding that.

25   And basically, so it was a prototype in

1   the sense that it only involved one type of

2   service. And there weren't formal specifications

3   for how it should be designed. We designed it how

4   we thought a CLEC might want it to look.

5   But back to the original question. I

6   was told by Rob that we should do new service for

7   residential all the way through, from the

8   pre-order integration of the CGI, to the firm

9   order, integration with the EDI-PC.

10   The specifics about what we should do

11   for like the internal integration to the CLEC

12   database and stuff like that, those were based on

13   suggestions we went along with the project from

14   Alex Dizon, because -- based on complaints that

15   CLECs had had.

16   So in other words, the CLECs don't want

17   to have to go through all the list of available

18   carriers to pick one in LENS if they know they're

19   always going to use a certain one. So that's why

20   originally we had -- I coded to get the list of

21   carriers from the CGI. And then after Alex told

22   me that a CLEC probably wouldn't want to do that,

23   we modified it to just pull from the database.

24   Q.   Okay. On the time and expense, you

25   said there was a time and materials purchase

1   order. Were there any real materials involved in

2   that in this, or was it all just time?

3   BY MR. BERMAN:

4   A.   The development environment that we

5   used, the Forte application development

6   environment, that license was purchased by

7   BellSouth outside of this purchase order.

8   Q.   How much was that for, by any chance?

9   A.   I cannot answer that.

10   Q.   But other than that, so there was no

11   material, per se?

12   A.   Correct.

13   BY MR. RUNNELS:

14   A.   Well, the cost of the documentation was

15   included.

16   Q.   The formatting of the report?

17   A.   The formatting, the printing.

18   Q.   And that goes into the 140,000, not the

19   120,000?

20   BY MR. BERMAN:

21   A.   That's correct.

22   Q.   And just to ballpark, what are

23   approximately the hourly wages, I mean, you're

24   charged for these people?

25   A.   The product architect is $200 an hour.

1   The project manager is $150 an hour. The software

2   consultants are broken up between $125 an hour and

3    $100 an hour.

4   Q.   Okay. And I could be wrong, but I just

5   took a ballpark on saying that the 140 -- the

6    $20,000 you spent after April 30th was -- does

7   that represent -- how many hours is that? About

8    $150,000? I don't know what you put in the cost

9   of this report.

10   A.   That would be 160 hours for somebody

11   billing at a rate of, what 125 an hour. That's

12   four weeks', basically, worth of work. Jack was

13   on -- Jack was billing at $125 an hour. So he was

14   on for the full month of May.

15   Q.   Jack was working more than 40-hour

16   weeks, I'm sure?

17   A.   Software consultants work more than

18   40-hour weeks. .

19   Q.   Doing the math, I figured it to be 50.

20   But I don't know if that's true.

21   A.   Jack was actually flying in from out of

22   town. So when you're out of town away from your

23   family, you have nothing else to do but work.

24   (A discussion was had off the record.)

25   Q.   On the product architect, it says

1   something about in the description to meet or

2   exceed performance requirements set forth by

3   BellSouth Telecommunications. Can you tell me

4   what the performance requirements were?

5   A.   That we were given, no. Like I said

6   earlier, we were given no requirements in terms of

7   message throughput, number of messages per minute,

8   what have you.

9   Q.   So are you saying just that it works

10   was enough, not how well it works?

11   A.   Can you rephrase that?

12   Q.   Well, you talk about performance

13   requirements. And I'm wondering if there is some

14   kind of performance level that you had to achieve

15   in order to meet these requirements, or was it

16   just that the system worked?

17   A.   The system worked and the underlying

18   services were capable -- production capable

19   services. We were given no instructions to

20   actually test the load of those services.

21   Q.   The load or how fast it does

22   something?

23   A.   That's correct.

24   Q.   You said you completed the project on

25   April 30th. I'm jumping back a little bit. Was

1   the CSR portion completed by April 30th?

2   A.   I would say no.

3   BY MR. RUNNELS:

4   A.   No.

5   Q.   So that should be -- that's not

6   completely accurate, that date there? This

7   statement that completed the project on

8   April 30th?

9   MR. D'CRUZ: Let me, just for the

10   record, it depends on what the definition of the

11   project is. I think they had testified earlier

12   that the CSR was an add-on or something.

13   BY MR. HOPKINS:

14   Q.   Okay. And let me follow up on that.

15   In the report it talks about view CSR, and that

16   would -- this function on page 8 that you

17   described in the report was not completed by

18   April 30th; is that correct?

19   BY MR. BERMAN:

20   A.   That's correct.

21   Q.   So to the extent that the project is

22   represented by what's reported in this document,

23   it wasn't done by April 30th?

24   A.   That's correct.

25   Q.   Okay.

1   BY MR. RUNNELS:

2   A.   Also, there were certain things that

3   basically the functionality was complete, but the

4   calls to do that functionality were not complete.

5   In other words, as I talked about earlier, you

6   have to send a certain call through the CGI server

7   to get back certain information on HTML format.

8   BY MR. BERMAN:

9   A.   I had access to that information

10   because I could print the source code through

11   NetScape or something like that.   So the code had

12   been developed to parse through the services and

13   features.   But we were missing one of the

14   variables to send in to get the servicing

15   features.

16   And essentially I was just -- one of

17   the other things I was waiting for was a phone

18   call saying here's what you need to put there.

19   Once I had got there -- it had already been tested

20   with the data, right.   I was just running the

21   data, running my code against data that I had

22   pulled off of a web browser.

23   And once I got the call and was able to

24   pull the code from the CGI, I just tested against

25   that.   So the major functionality was done.   There

1   were just really some minor details.

2   Q.   And so that variable wasn't in the

3   specification documentation that you received.

4   And so that was one of the gaps in the

5   documentation?

6   A.   Right.

7   Q.   Moving on to page 2. Talking about the

8   requirement when you say that the LENS web

9   application was used as a model for the business

10   requirements, is that because you had to go

11   through the LENS screens to accomplish the

12   business functions? So it had to be the business

13   requirements?

14   Do you understand what I'm asking?

15   A.   Yes. As we stated earlier, we have not

16   worked in this area or business domain. And so

17   the LENS application actually was a way to let us

18   leverage and understand how a CLEC would have to

19   integrate from a business perspective the

20   information that was required, etc., to perform a

21   new service for residential.

22   Q.   And on the last sentence, you say that

23   there was non-BST requirements in the software.

24   And is it true that those came from Alex Dizon?

25   //

1   BY MR. RUNNELS:

2   A.   Yeah, they weren't necessarily

3   requirements. They were more along the lines of

4   suggestions.

5   Q.   Okay.

6   A.   You know, what would a CLEC most likely

7   want to integrate into the application.

8   Q.   On the software development, you've

9   talked about because you've had this framework,

10   you more or less two months ahead of the curve, is

11   that typical for consulting firms or people that

12   do software? Or would a CLEC have to be 60 days

13   behind to be starting from scratch?

14   BY MR. BERMAN:

15   A.   In all software development, no matter

16   what language or tools you use to develop that

17   software, there are commercially available

18   products out there that allow you to leverage

19   common code, common user interfaces, common access

20   patterns, passed to various databases, it's

21   generally available to anybody writing software.

22   Q.   On the following page, on page 3 under

23   documents and information use, you used the

24   phrase, within the second sentence. These

25   information sources included. Is that an

1   exclusive list? I mean does include everything

2   you've got, or could it be read included but not

3   limited to?

4   A.   You'd have to rephrase that.

5   Q.   Well, okay. From the way the paragraph

6   reads, you could read it two ways. One is that

7   these are the only three documents you've got, you

8   received from BellSouth. Or these are three of a

9   bigger universe of documents you received from

10   BellSouth.

11   Which one accurately portrays what you

12   intended to mean by this?

13   A.   These are the only documents that we

14   received from BellSouth.

15   Q.   So it's an exclusive list. There's no

16   other documents received outside --

17   A.   Correct.

18   Q.   Okay.

19   A.   The wording included is not --

20   Q.   Do you know when you received these

21   documents?

22   BY MR. RUNNELS:

23   A.   The LENS CGI interface specification,

24   we received -- I received that from Day One of the

25   project. I don't remember the exact date. The

1   specifications were not -- the specifications were

2   for the version of LENS at that time. LENS

3   actually went through a version change during the

4   development of our application.

5   So we had to -- so at a certain point,

6   and again, I don't remember the date, we switched

7   from using the LENS version -- I don't remember

8   what it was -- to the version 2.1. And the LEO

9   implementation guide actually came in later. We

10 didn't have that to begin with.

11   Q.   Okay. And the LENS system, you can get

12 that. So it's whenever you got access to LENS?

13 BY MR. BERMAN:

14   A.   Right.

15   Q.   On the time line, you said it's from

16 February 24th to April 30th. What started on

17 February 24th? Was that when you contracted with

18 them, or is that when someone began to put pen to

19 paper, or how does that -- what does that date

20 represent?

21   A.   Code development.

22   Q.   Code development. So is that when --

23 Jack, is that when you started? I figure --

24 BY MR. RUNNELS:

25   A.   That's fine. Yeah, that's when I

1 started developing the code.

2   Q.   Okay. And that's week one. Can you

3 give an estimate of when in the process you

4 thought you had got the updated LENS

5 specification, the LENS 2.1?

6   A.   Week four, week five. I'm not sure.

7 Not much had changed. In fact, I can't recall

8 that anything had changed that necessarily

9 affected my coding anyway.

10   Q.   So this -- if we were to -- I don't

11 mean to be real picky, but if we were to correct

12 this statement on these documents that you

13 received, it would be also LENS specification 2.0

14 and LENS specification 2.1; is that correct?

15   A.   I don't remember the version number for

16 the original LENS specs that I have.

17   Q.   Assuming it's 2.0.

18   A.   Assuming it's 2.0, then it would,

19 yeah. There was an earlier version of the LENS

20 CGI specs.

21   Q.   Okay. So there's actually four

22 documents that you received rather than four -- or

23 four sources of information?

24 BY MR. BERMAN:

25   A.   (Witness nodded head affirmatively.)

1   Q.   At that stage, week four or week five,

2 how far along into the project were you? Is there

3 an easy way to describe how that process --

4   A.   Yeah, I can talk to that. I would say

5 from a development perspective in comparing this

6 to other projects, at this point in time, almost

7 all of the window development for the order

8 processing was completed.

9   Probably 75 percent of the time, for

10 the amount of time it took to develop this

11 application, it was spent on integration with the

12 CGI and the EDI. The whole user interface was

13 rather quickly. And again, that's based on using

14 prebuilt framework components.

15   Q.   And you -- Jack, I think you said you

16 had had to call for the LENS -- updated LENS

17 specification. Did someone tell you that there

18 was one, and you got a copy of it, or did

19 BellSouth notify you that there was an updated

20 specification?

21 BY MR. RUNNELS:

22   A.   I think it was when I called to ask a

23 question about the original specifications, I was

24 told that a new version was coming out on a

25 certain date. I don't remember what that date

1   was. And I was E-mailed a draft copy of those

2   specs. And then when the actual specs came out, I

3   was E-mailed a copy of that as well.

4   So I didn't use -- I didn't even use

5   the draft, because I got the actual specs like, I

6   don't know, a day or two after that anyway.

7   Q.   Let's move on to the next page on 4.

8   And it's new service residential. When you talk

9   about the web-based application, am I correct that

10   you -- the system still goes through the web

11   browser, it's just that it's invisible to the end

12   user?

13   BY MR. BERMAN:

14   A.   It doesn't go through the browser. It

15   integrates to the CGI server. The LENS system,

16   the browser, when you talk about viewing LENS

17   through the browser, that's talking to the CGI

18   server as well.

19   Q.   Is there any way you can try to draw me

20   a picture? And I don't want any -- if any

21   diagrams you have in this package have it, on the

22   difference between what happens if you go through

23   just a LENS system as opposed to the LENS CGI, the

24   Albion interface?

25   A.   I can't answer as to the LENS to the

1   CGI.

2   BY MR. RUNNELS:

3   A.   The calls that are sent are essentially

4   the same. When you're looking at a web page and a

5   browser and you enter information into whatever

6   fields are on that page, the information that you

7   entered becomes part of a query string that is

8   sent back to the CGI server.

9   Rather than having the user do that

10   through the web browser, we do that through our

11   application. Some information is entered by the

12   user. Some is pulled from the database. But the

13   end query string that gets built will look the

14   same as one that was one that was created through

15   a browser using LENS.

16   Q.   I think I'm confusing my technical

17   terms. And is there a difference between a web

18   server and CGI server?

19   A.   As far as I know, the IP address of the

20   CGI server that I was using for the application is

21   the same IP address that is used by the LENS --

22   used by the web browser to communicate from LENS

23   to the CGI.

24   Q.   And when you're using the -- just call

25   it the OP interface, you have to step through the

1   same screens, the system does, that you'd

2   otherwise have to step through if you use the LENS

3   system? Is that correct?

4   A.   That is not correct.

5   Q.   Okay. Can you explain the difference?

6   A.   Because for the pre-order phase, CGI

7   integration is required. You must validate an

8   address, you must get a list of available

9   telephone numbers.

10   Q.   Okay. I got you.

11   A.   In LENS, you would continue to go

12 through the CGI interface with a firm order part

13 of that. That is not required within our

14 application. There is no CGI interface during the

15 firm order phase of our application.

16   Q.   Okay. But you could go -- I'll get to

17 that in a minute. The EDI -- and the result of

18 the completing the order, you get an EDI flat

19 file, and that's sent to somewhere; right?

20   A.   Right.

21   Q.   And have you tested whether that EDI

22 flat file can be used by the EDI-PC and result in

23 a valid order?

24 BY MR. BERMAN:

25   A.   Yes.

1   Q.   You've tested it all the way from an

2   actual --

3   A.   We've tested it all the way through and

4   out the back side of the back side of Harbinger's

5   Trusted Link Software.

6   Q.   Do you know what happens when it gets

7   to BellSouth, or did you just stop it to say --

8   A.   We stopped it there and handed that

9   file at that point off to Alex Dizon.

10   Q.   Okay.   So it never went into

11   BellSouth's system.   It just stopped?

12   A.   That's correct.   It was a production

13   system.   We'd be entering production orders.

14   Q.   On the pre-order phase on the address

15   validation, are you familiar with how the LENS

16   system works in the inquiry mode?

17   A.   No, I'm not.

18   Q.   Are you?

19   BY MR. RUNNELS:

20   A.   Yes.

21   Q.   In the inquiry mode, would you agree

22   with me that for address validation in others you

23   have to validate the address before performing

24   each other function, like reserve telephone

25   numbers, receive features?

1 A. Yes.

2 Q. All of that. Does the OP interface

3 perform an address validation before reserving

4 telephone numbers and doing features invisible to

5 the user?

6 A. Since address validation predicates

7 everything else, that is the first tab in the

8 folder that is displayed to the user.

9 Q. Right.

10 A. A valid address must be obtained from

11 the CGI server before any of the other tabs are

12 even enabled. So within our application, you

13 couldn't even try to observe a phone number.

14 Q. Right. But in LENS, you have to do it

15 multiple times to do different tasks. Do you do

16 that behind the scenes?

17 A. We store temporarily within --

18 basically the way our application works is it's

19 object oriented. There's one big object called

20 order, which has a lot of attributes hanging off

21 of it, one of which would be the address, the

22 validated address. And as an address is

23 determined to be validated, that information is

24 stored --

25 Q. Right.

1   A.   -- there. That information is then

2   used to do the other services.

3   Q.   Okay.

4   A.   The user does not have to enter that

5   valid address again, but that information will be

6   used to call through to the CGI server to get the

7   telephone numbers.

8   Q.   That function is still performed

9   invisible to the user?

10   A.   That is correct.

11   Q.   And is it the time associated in the

12   associated with those -- let's say for example it

13   takes two seconds to send out an address

14   validation and get a confirmation back from

15   BellSouth. Is that delay involved every time you

16   do the reserve phone number features and services

17   function since that has to be performed?

18   A.   That may be the case, but you save time

19   on the fact that you don't have to type it in.

20   Q.   Right. On the reserve phone numbers

21   feature -- and you have a picture of it on

22   page 12 -- there's only -- it shows seven

23   numbers. And in LENS, when you make a call -- I

24   don't know if you're aware -- it displays 10

25   numbers.

1   A.   There probably are more. There's a

2   scroll bar to the right. The scroll bar is -- if

3   there are only seven numbers, the scroll bar would

4   not even be visible.

5   Q.   Right.

6   A.   Well, it would be, I guess, disabled.

7   It wouldn't look the way that it looks there.

8   Q.   So it probably -- maybe you should have

9   put a box that has 10 instead of seven. Is that

10 what you're -- it's a presentation issue here, not

11 a --

12 A.   Right.

13 Q.   Okay.

14 A.   It was determined that again, this was

15 one of those issues where we're the CLEC, and we

16 get to make the decision. For our CLEC, we would

17 probably only be choosing one number at a time.

18 So it wasn't really necessary to increase the

19 space of that to see 10 numbers.

20 Q.   On the features, which is I think the

21 following page, there are -- do you know

22 approximately how many features there are

23 available to someone who is ordering new service

24 residential?

25 A.   I know it's a lot.